

<b>Exhibit P-40, Budget Item Justification Sheet</b>								Date: February 2004				
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Weapons and Tracked Combat Vehicles (2)								P-1 Item Nomenclature: AAV7A1 PIP				
Program Element: 0202100M Divisions (Marine)				Code: A	Other Related Program Elements:							
	Prior Years			FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	To Complete	Total Prog
Proc Qty												
Gross Cost	378.4			117.2	104.2	58.6	10.6	17.8	44.8	44.0	0.0	775.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	378.4			117.2	104.2	58.6	10.6	17.8	44.8	44.0	0.0	775.6
Initial Spares	9.9			0.2	0.0	0.0	0.0	0.0	1.6	1.6	0.0	13.3
Total Proc Cost	388.3			117.4	104.2	58.6	10.6	17.8	46.4	45.6	0.0	788.9
Flyaway U/C												
Wpn Sys Proc U/C												

The Assault Amphibious Vehicle 7A1 Product Improvement Program (AAV7A1 PIP) is for the procurement of modification kits/assemblies that have been tested, reviewed and approved by the Marine Corps. These modifications, separate from the AAV Reliability, Availability, and Maintainability/Rebuild to Standard (AAV RAM/RS) effort, provide significant improvements to reliability, maintainability, battlefield survivability, combat capability and operational safety. These modifications implement improvements based upon Fleet Marine Forces' Deficiency Reports and Beneficial Suggestions.

The Enhanced Appliqué Armor Kit (EAAK) provides the AAVP7A1 and AAVC7A1 with protection against 14.5 mm rounds and overhead fragmentation blast. The EAAK that is currently utilized was fielded in 1991. The paint system utilized on the armor proved to be inadequate for extended AAV waterborne operations. As a result, more than 500 sets of EAAK have been washed out of the system due to corrosion since original fielding. Current projections are for a washout rate of 55 to 60 systems per year. As age and usage increases, the washout rate continues to increase. This reprocurement will replace the unserviceable armor and provide improved corrosion protection. A contract was awarded to Rafael Corporation.

The AAV RAM/RS vehicle has been developed to reduce the constantly increasing operational and support costs of the AAV7A1 Family of Vehicles (FOV). The AAV RAM/RS vehicle incorporates major modifications to the existing vehicle design that specifically address the top three Operational and Support cost drivers (Engine, Transmission and Suspension system) of this platform, thereby reducing overall life-cycle costs and providing a cost effective transition from the current AAV to the future Advanced Amphibious Assault Vehicle (AAAV).

The AAV Recovery variant (AAVR7A1) is the primary maintenance and recovery vehicle of the AAV family of vehicles and is an alternate source of maintenance and recovery for other elements of the Marine Expeditionary Force. This initiative replaces the AAVR7 aging and discontinued unique subsystems to sustain the vehicles capability and improve its supportability, readiness and safety throughout the remaining service life of the vehicle.

Modification	Installing Agent	Installation	End Item
AAV7A1 Mod Kits	Various	Begin: Various End: Various	AAV7A1 FOV
EAAK	FMF	Begin: FEB 04 End: JUN 05	AAV7A1 FOV
AAV RAM/RS	MCLB Albany	Begin: OCT 98 End: DEC 05	AAV7A1 FOV
AAVR7A1 Upgrade	MCLB, UDLP, FMF	Begin: DEC 07 End: DEC 09	AAVR7A1

Exhibit P-5, Weapon WPN SYST Cost Analysis				Appropriation/ Budget Activity/Serial No: Procurement, Marine Corps (1109) / Weapons and Tracked Combat Vehicles (2)				P-1 Line Item Nomenclature: AAV7A1 PIP			Weapon System Type:		Date: February 2004			
Weapon System Cost Elements				ID				FY 03			FY 04			FY 05		
				CD				TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
					\$000	Each	\$	\$000	Each	\$	\$000	Each	\$			
AAV MOD KITS					5752	VAR	VAR	8133	VAR	VAR	7705	VAR	VAR			
AAV RAM/Rebuild																
Hardware					56831	147	386605	55198	132	418167	31437	60	523950			
Labor					38103			37849			18463					
Teardown of Vehicles For Next FY																
SUBTOTAL					94934			93047			49900					
SUPPORT COSTS																
Engineering/Program Mgt Spt																
ILS (Tech Manuals, Training)																
SUBTOTAL																
AAV Enhanced Applique Armor Kit (EAAK)					16549	395	41896	2976	70	42514	991	25	39640			
Non-Recurring Start-Up Cost																
SUBTOTAL					16549			2976			991					
TOTAL					117235			104156			58596					
Active					117038			10722			57868					
Reserve					197			93434			728					
Remarks:																
FY05 AAV RAM/Rebuild funding is the result of PR05. The unit cost increase in FY05 is the result of a reduced quantity of vehicles.																
FY04 AAV Ram/Rebuild funding of \$14.250M was a Congressional Plus-up and \$78.797M was the result of IFF Supplemental for the rebuild of 132 vehicles.																
FY03 AAV RAM/Rebuild funding includes \$56.9M in supplemental funding from Operation Iraqi Freedom.																
EAAK Unit costs vary due to long lead material procurement in order to keep a constant production rate.																

Exhibit P-5a, Budget Procurement History and Planning									Date:	
									February 2004	
Appropriation / Budget Activity/Serial No: Procurement, Marine Corps (1109) / Weapons and Tracked Combat Vehicles (2)				Weapon System Type:			P-1 Line Item Nomenclature: AAV7A1 PIP			
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail?	Date Revsn Avail	RFP Issue Date
Fiscal Years										
AAV MOD KITS										
FY 03	Various	VAR	Various	Var	Var	VAR	VAR	Yes	N/A	N/A
FY 04	Various		Various	Var	Var	VAR	VAR	Yes	N/A	N/A
FY 05	Various	VAR	Various	Var	Var	VAR	VAR	Yes	N/A	N/A
AAV RAM/REBUILD										
FY03	MCLB,Albany	WR	MCSC	Oct-02	Jan-03	147	386605	Yes	N/A	N/A
FY04	MCLB,Albany	WR	MCSC	Mar-04	Oct-04	132	418167	Yes	N/A	N/A
FY05	MCLB,Albany	WR	MCSC	Oct-04	Jan-05	60	523950	Yes	N/A	N/A
EAAK										
FY03	Rafael, WASH D.C.	FFP	MCSC	Oct-02	Aug-03	395	41896	Yes	N/A	N/A
FY04	Rafael, WASH D.C.	FFP	MCSC	Oct-03	Oct-04	70	42514	Yes	N/A	N/A
FY05	Rafael, WASH D.C.	FFP	MCSC	Oct-04	Oct-05	25	39640	Yes	N/A	N/A
REMARKS:										
AAV RAM/Rebuild - Labor / Material for rebuild directed to Marine Corps Logistics Bases. Contracts for hull modifications and engines are sent to industry.										
Unit cost increase due to MCLB cost growth based on the hours per vehicle being higher than projected.										

INDIVIDUAL MODIFICATION														Date	February 2004						
MODIFICATION TITLE: AAV MOD KITS																					
MODELS OF SYSTEMS AFFECTED: AAV7A1 Family of Vehicles (Modification kits and secondary repairables)																					
DESCRIPTION / JUSTIFICATION:  The AAV7A1 Modification Kits Program is for the procurement of modification kits/assemblies that have been tested, reviewed and approved by the Marine Corps. Modifications such as .50Cal MG mod, and Fan Mod Assembly are separate from AAV RAM Rebuild and provide significant improvements to vehicular reliability, maintainability and operational safety. These modifications are also a method by which Fleet Marine Forces (FMF) Quality Deficiency Reports and Beneficial Suggestions are implemented.																					
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:  APPROVED FOR SERVICE USE																					
Installation Schedule:																					
	Pr Yr									FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										VARIOUS				VARIOUS				VARIOUS			
Outputs										VARIOUS				VARIOUS				VARIOUS			
Reserve Non-Add various for all FYs																					
	FY 2006				FY 2007				FY 2008				FY 2009				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs	VARIOUS				VARIOUS				VARIOUS				VARIOUS								
Outputs	VARIOUS				VARIOUS				VARIOUS				VARIOUS								
METHOD OF IMPLEMENTATION: Field      ADMINISTRATIVE LEADTIME: VAR Months      PRODUCTION LEADTIME: VAR Months Contract Dates:      FY 2000 N/A      FY 2001      N/A      FY 2002      N/A Delivery Date:      FY 2000 N/A      FY 2001      N/A      FY 2002      N/A																					

INDIVIDUAL MODIFICATION																		Date	February 2004			
MODIFICATION TITLE (Cont): AAV MOD KITS 2																						
FINANCIAL PLAN: (\$ in Millions)																						
Prior Years				FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
Qty	\$			Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																						
PROCUREMENT																						
Kit Quantity				VAR		VAR		VAR		VAR		VAR		VAR		VAR		VAR				
Inst Kits, Nonrecurring	7.358				5.752		8.133		7.705		10.080		16.709		9.992		8.717		Cont.		74.446	
Equipment, Nonrecurring																						
EAAK																						
Other																						
Installation of Hardware																						
FY 2000 Eqpt -- Kits																						
FY 2001 Eqpt -- Kits																						
FY 2002 Eqpt -- Kits																						
FY 2003 Eqpt -- kits																						
FY 2004 Eqpt -- kits																						
FY 2005 Eqpt -- kits																						
FY 2006 Eqpt -- kits																						
FY 2007 Eqpt -- kits																						
(FY(TC) Eqpt (xx kits)																						
Installment Cost																						
Total Procurement Cost	7.358				5.752		8.133		7.705		10.080		16.709		9.992		8.717				74.446	

INDIVIDUAL MODIFICATION																Date	February 2004				
MODIFICATION TITLE: Enhanced Applique Armor Kits (EAAK)																					
MODELS OF SYSTEMS AFFECTED: AAV7A1 Family of Vehicles (Modiification kits and secondary repairables)																					
DESCRIPTION / JUSTIFICATION:  Enhanced Applique Armor Kits (EAAK): EAAK provides protection from threats up to and including 14.5 mm projectiles and blast fragmentation from up to 155 mm projectiles. EAAK was originally procured in 1991 and was expected to last until the fielding of the AAV. With AAV program delays, the existing stocks of EAAK have experienced severe deterioration due to salt water corrosion. The replacement EAAKs will be chemically treated to prevent this type of corrosion.																					
DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:  TDP reviewed by both the vendor and PM and now incorporates all corrosion preventive measures.																					
Installation Schedule:																					
	Pr Yr									FY 2003				FY 2004				FY 2005			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs													2		93	93	107	83	87	75	38
	FY 2006				FY 2007				FY 2008				FY 2009				To	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete				
Inputs																					
Outputs		12				12												602			
METHOD OF IMPLEMENTATION:		Depot/Contractor				ADMINISTRATIVE LEADTIME:				4 Months				PRODUCTION LEADTIME:				12 Months			
Contract Dates:		FY 2003 OCT 02				FY 2004 OCT 03				FY2005 OCT 04											
Delivery Date:		FY 2004 AUG 03				FY 2004 OCT 04				FY2005 OCT 05											







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